Pastel

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Revision of the Mail Box Protocol

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NETWORK WORKING GROUP
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Obsoletes RFC 221, NIC 7612

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REVISION OF THE MAIL BOX PROTOCOL

The file transfer committee met and discussed the Mail Box Protocol RFC 221, NIC 7612. The potential utility for the mechanism was confirmed and a couple of changes suggested. We first give the changes and then restate the Protocol.

CHANGES

1) The Mail Box Protocol is only to allow ASCII strings of text formatted for a network standard line printer rather than allowing other data types.

2) A new command is to be added to the File Transfer Protocol called "Append with Create" which appends to a file if the file exists, and creates a file if it does not exist.

3) The standard path name for the mailbox is to be, using conventional metalanguage symbols,

"MAIL" <separator> ("PRINTER"/<ident>)

<separator> is the ASCII GS, octal 035. The semantics of the above are the following:

<ident> is a NIC IDENT.

"MAIL" <separator> "PRINTER" would be interpreted by the receiving site as meaning Append with Create the transmitted file to a bulk mail file to be printed or directly output it to a printer.

"MAIL" < separator> <ident> would be interpreted to mean either

1) The same as "MAIL" <separator> "PRINTER" i.e., ignore <ident> or 13c5a

2) Append with Create the following file to a file specifically for the person designated by <ident> for either online access or printing or both. 13c5b

The problem of delivering mail to TIPs was discussed. 13d

At the moment TIPs support only the Telnet Protocol, but it is planned to support the Data Transfer Protocol. TIPs will have an ASCII line printer available as an optional device. People desiring to send a mail item to a TIP with a printer can open a standard published socket and transmit to it with Telnet Protocol now, later also with the Data Transfer Protocol. The NIC's plans with regard to TIPs is not to do automatic network delivery to them. Messages to people using TIPs can be sent to them through the NIC and will be delivered as with everyone else directly to the person's initial file at the NIC. The TIP user can read the item online or obtain a hardcopy at his terminal with the Output Device Teletype command of NLS. 13e

MAIL BOX PROTOCOL 14

The Mail Box Protocol will use established network conventions, specifically the Network Control Program, Initial Connection Protocol, Data Transfer Protocol, and File Transfer Protocol (as described in Current Network Protocols, NIC 7104). 14a

The transmission is to be Network ASCII. The standard receiving mail printer is assumed to have a print line 72 characters wide, and a page of 66 lines. The new line convention will be carriage return (Hex 'OD'), (Octal '015') followed by line feed (Hex 'OA') (Octal 012') as per the Telnet Protocol, RFC 158, NIC 6768. The standard printer will accept form feed character (Hex'OC') (Octal'014') as meaning move paper to the top of a new page. 14b

It is the sender's responsibility to control the length of the print line and page. If more than 72 characters per line are sent, of if more than 66 lines are sent without a form feed, then the receiving site can handle these situations as appropriate for them. These conventions can be changed by control codes as described below. At the head of the message or document sent there is to be two copies of an initial address string each terminated by a form feed. This address string is to contain the sender's name and address, and the

receiver's name and address formatted in some reasonable, easy-to-read form for a clerk to read and distribute. Comments could also be included in the address string. The requirements for two copies are to make one readable from a fan fold paper stack without effort. 14c

Initial Connection 15

Initial Connection will be as per the Official Initial Connection Protocol, Document #2, NIC 7101, to the standard File Transfer socket #3. 15a

File Transfer 16

The mail item (file) to be transferred would be tranferred according to the File Transfer Protocol. 16a

As per the File Transfer Protocol, a file (mail item) can be sent in more than one data transaction as defined in the Data Transfer Protocol. End of file is indicated by the file separator (as defined in Data Transfer Protocol) or by closing the connection. 16b

Order of Transactions 17

The only basic operation required is an Append with Create. 17a

Append with Create Request 17b

(Mailer) User ----------> Server (Mail Box) 17c

<File - data> 17d

----------> 17e

End of File indication 17f

----------> 17g

Acknowledge 17h

<---------- 17i

The data type default is network ASCII. The standard line printer default is as defined above. Other control transactions can be used. 17j

CONTROL TRANSACTIONS TO BE USED 18

OP CODE

Hex	Octal	
09	011	Error or unsuccessful terminate
0A	012	Acknowledge or successful terminate
05	005	Append with create request (add to existing file or create file if none exists)
5A	132	Change printer control settings

ERROR CODES

All error codes defined in the File Transfer Protocol could be returned.

PRINTER CONTROL CODES

Hex	Octal	
D1	321	Meaning: Set line width to 72 characters
D2	322	Meaning: Use the full width of your printer
03	323	Meaning: Set page size to 66 lines
04	324	Meaning: Set page size to infinite

Other virtual printer control codes can be added in the future.

Other classes of control codes can be added as the need arises.

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